Application for Certification as an Eligible Energy Resource Under the Delaware Renewable Energy Portfolio Standard

1. Name of Facility
   Giguere, Richard Residence - R Giguere

2. Facility Address
   523 Harbor Rd
   Millville, DE 19970

Is the facility located within the PJM control area? ☑ **Yes** ☐ **No**
If No, does the Facility have import capabilities? ☐ **Yes** ☐ **No**

3. Name of Owner
   Richard Giguere
   Mailing Address
   523 Harbor Rd
   Millville, DE 19970

Phone **302 537 1064** Fax _____

Email **rpgone00@hotmail.com**

4. Name of Operator
   same as owner
   Mailing Address
   _____
   _____

Phone _____ Fax _____

Email _____

5. Name of Contact Person
Allyson Browne, SRECTrade, Inc.
Mailing Address
201 California Street, Suite 630
San Francisco, CA 94111

Phone 877-466-4606 Fax 732-453-0065

Email applications@srectrade.com

6. Name of REC/SREC Owner
same as owner
Mailing Address
_____
_____

Phone _____ Fax _____

Email _____

7. List all PJM-EIS GATS State Certification Numbers assigned to this facility:
_____
_____
_____

8. Operational Characteristics:

Fuel Types Used (check all that apply):

☐ Gas combustion from the anaerobic digestion of organic material

☐ Geothermal

☐ Ocean, wave or tidal actions, currents, or thermal differences

☐ Qualified Biomass[i]

☐ Qualified Fuel Cells[ii]

☐ Qualified Hydroelectric[iii]

☐ Qualified Methane Gas captured from a landfill gas recovery system[iv]

☑ Solar

☐ Wind

If co-firing, provide the formula on file with PJM Environmental Information Services, Inc. (PJM-EIS)____n/a_____

Rated Capacity (in megawatts)_____0.01026_____

If multiple fuel types are utilized, attach the formula for computing the proportion of output per fuel type by megawatts per hour generated.

Facility **Final Approved Interconnection Date**_____2/4/16_____

If co-firing with fossil fuels, co-fire start date____n/a_____

If co-firing with fossil fuels, attach the allocation formula on file with PJM.

9. Is the Applicant's facility customer-sited generation[v]?

☑ Yes ☐ No

Is the Applicant's facility a community owned generating facility[vi]?

☐ Yes ☑ No

Can the output from the customer-sited generation be appropriately metered?

☑ Yes ☐ No

I, Allyson Browne (print name) hereby certify under penalty of perjury that

1. I have made reasonable inquiry, and the information contained in this Application is true and correct to the best of my knowledge, information and belief.

2. I am authorized to submit and execute this Application and to bind myself and/or my company to the representations contained herein.

3. I /my company agree(s) to comply with and be subject to the jurisdiction of the Public Service Commission of the State of Delaware for any matters arising out of my submission of this Application or the granting of the Application.

4. In the event that any of the information contained in this Application changes pending the consideration of this Application or after the Application is granted, I/my company will amend the Application to provide the Commission with such changed information.

5. I acknowledge that if any of the representations made in this Application or in any amendment thereto are found to be untrue when made, I/the company may be subject to sanctions, including but not limited to monetary fines and/or the revocation of any Certificate granted as a result of the representations made in this Application.

Signature: Allyson Browne

Date: 03/02/2016

Required Documentation:

- If the facility is customer-sited generation, attach a copy of the utility's Final Approved Interconnection Agreement

- If the facility is a community-owned energy generating facility, attach a list of contact information (names, address, phone number, fax, and email) of all owners or customers who are sharing the output of the generator.

- One copy of U.S. Department of Energy, Energy Information Administration Form EIA-860, if rated capacity is >1.0 MW

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[i] "Qualified Biomass" means electricity generated from the combustion of biomass that has been cultivated in a sustainable manner as determined by Delaware Department of Natural Resources and Environmental Control (DNREC), and is not combusted to produce energy in a waste to energy facility or in an incinerator.

[ii] "Qualified Fuel Cells" means electricity generated by a fuel cell powered by Renewable Fuels, as that term is defined in Section 1.0 of the Rules and Procedures to Implement the Renewable Energy Portfolio Standard, Delaware Public Service Commission Regulation Docket No. 56.

[iii] "Qualified Hydroelectric" means electricity generated by a hydroelectric facility that has a maximum design capacity of 30 megawatts or less from all generating units combined that meet appropriate environmental standards as determined by DNREC.

[iv] "Qualified Methane Gas" means electricity generated by the combustion of methane gas captured from a landfill gas recovery system; provided, however, that:

1. Increased production of landfill gas from production facilities in operation prior to January 1, 2004 demonstrates a net reduction in total air emissions compared to flaring and leakage;
2. Increased utilization of landfill gas at electric generating facilities in operation prior to January 1, 2004 (i) is used to offset the consumption of coal, oil, or natural gas at those facilities, (ii) does not result in a reduction in the percentage of landfill gas in the facility's average annual fuel mix when calculated using fuel mix measurements for 12 out of any continuous 15 month period during which the electricity is generated, and (iii) causes no net increase in air emissions from the facility; and
3. Facilities installed on or after January 1, 2004 meet or exceed 2004 Federal and State air emission standards, or the Federal and State air emission standards in place on the day the facilities are first put into operation, whichever is higher.

[v] "Customer-sited Generation" means a generating unit that is interconnected on the end use customer's side of the retail electricity meter in such a manner that it displaces all or part of the metered consumption of the end-use customer.

[vi] "Community-owned Energy Generating Facility" means a renewable energy generating facility that has multiple owners or customers who share the output of the generator, which may be located either as a stand-alone facility or behind the meter of a participating owner or customer. The facility shall be interconnected to the distribution system and operated in parallel with an electric distribution company's transmission and distribution facilities.

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A PHI Company

PART 1

DELAWARE LEVEL 1 INTERCONNECTION APPLICATION & AGREEMENT

With Terms and Conditions for Interconnection
(Lab Certified Inverter-Based Small Generator Facilities Less than or Equal to 10 kW)

(Application & Conditional Agreement – to be completed prior to installation)

INTERCONNECTION CUSTOMER CONTACT INFORMATION

Customer Name: Richard Giguere

Mailing Address: 523 Harbor Rd

City: Clarksville State: DE Zip Code: 19970

Contact Person/Authorized Agent (If other than above): _____

Mailing Address (If other than above): _____

Telephone (Daytime): 3025371064 (Evening): _____

Fax Number: _____ E-Mail Address (Required): rpgone00@hotmail.com

Alternate Project Contact Information: (if different from Customer-Generator above)

Alternate Name: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Telephone (Daytime): _____ (Evening): _____

Fax Number: _____ E-Mail Address: _____

If an email is provided for your alternate contact, that contact will receive all email communications.

FACILITY INFORMATION

Facility Address: 523 Harbor Rd

City: Clarksville State: DE Zip Code: 19970

DPL Account #: 5500 0385 173 Meter #: IND038968978

Current Annual Energy Consumption (optional): 18000 kWh

Check if this Facility (building) is, or is going to be, NEW CONSTRUCTION: ☐

Estimated Commissioning Date: _____

Energy Source: Solar PV Prime Mover: Photovoltaics

Type of Application: Initial ☒ Addition/Upgrade ☐ [1]

Initial Rating: DC Generator Total[2] Nameplate Rating: 10.26 (kW),
AC Inverter Total[3] Rating 9.8 (kW),
AC System Design Total Capacity[4]: 9.8 (kW) 9800 (kVA)

Added Rating (**if upgrade**): DC Generator Total Nameplate Rating: _____ (kW),
AC Inverter Total Rating _____ (kW),
AC System Design Total Capacity: _____ (kW) ____ (kVA)

Total Rating (**if upgrade**): DC Generator Total Nameplate Rating: _____ (kW),
AC Inverter Total Rating _____ (kW),
AC System Design Total Capacity: _____ (kW) ____ (kVA)

Generator (or PV Panel) Manufacturer, Model #[5]: SolarWorld 285w MONO

A copy of Generator nameplate and Manufacturer's Specification Sheet may also be submitted

Number of Generators (or PV Panels): 36

Type of Tracking if PV: Fixed ☒ Single Axis ☐ Double Axis ☐

Array Azimuth if PV: 172 ° Array Tilt if PV: 20 °

Shading Angles if PV at E, 120°,150°,S,210°,240°,W: _____ ° (Separate with comas)

Inverter Manufacturer[6]: Fronius Model Number(s) of Inverter[7]: PRIMO 6.0 & 3.8

Number of Inverters[8]: 2 Inverter Type: Forced Commutated ☐ Line Commutated ☒

Ampere Rating: 40.83 $Amps_{AC}$, Number of Phases: ☒ 1 ☐ 3

Nominal Voltage Rating: 240 V_{AC}, Nominal DC Voltage: 436 V_{DC},

Power Factor: 85-100 %, Frequency: 60 Hz, Efficiency: 96 (%)

DPL Taggable, Lockable, Accessible Disconnect[9]: ☐ Yes ☒ No,

If Yes, Location: _____

One-line Diagram Attached (Required): ☒ Yes ☐ No,

Site Plan Attached (Required): ☒ Yes ☐ No

Do you plan to export power?[10] ☒ Yes ☐ No, If Yes, Estimated Maximum: 8 kW_{AC}

Estimated Gross Annual Energy Production: 13,089 kWh

Is the inverter IEEE/UL1741 lab certified? Yes ☒ No ☐
(If yes, attach manufacturer's cut sheet showing listing and label information from the appropriate listing authority, e.g. UL 1741 listing. If no, facility is not eligible for Level 1 Application.)

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[1] Initial if first time generator request. Addition/Upgrade if this is an add-on to a previously approved system.
[2] Sum of all generators or PV Panels
[3] Sum of all inverters
[4] This will be your system design capacity based upon your unique system variables.
[5] If more than one type, please list all manufactures and model numbers.
[6] If more than one manufacture, please list all.
[7] If more than one model number, please list all.
[8] Attach additional sheets as necessary in the event of multiple inverters of various types/sizes
[9] This is strongly recommended by the utility. Best practice is to have an externally accessible, lockable, disconnect with visible open/close connection and to have appropriate signage on the disconnect, such as 'Solar PV AC Disconnect' (preferably red) and on the meter housing 'Caution, Solar Electric System'" (preferably yellow). If the disconnect is not in the immediate vicinity of the meter, please include the disconnect location on the meter signage. This enables the utility and first responders to more quickly deal with an emergency situation.
[10] Yes, if your expected maximum output of the inverter (kW AC) is greater than the lowest load you anticipate at your facility during maximum PV output (kW). The difference would be the amount you may export.

EQUIPMENT INSTALLATION CONTRACTOR

Owner (Customer) Installed: ☐ Yes ☐ No

Contractor Name: Alutech United Inc

Mailing Address: 117 Dixon St

City: Selbyville State: DE Zip Code: 19975

Telephone (Daytime): 800-233-1144 (Evening): 302-841-9059

Fax Number: 302-436-5100 E-Mail Address (Required): shelly@greenstreetsolar.com

ELECTRICAL CONTRACTOR

Electrical Contractor Name: Alutech United Inc

Mailing Address: 117 Dixon St

City: Selbyville State: DE Zip Code: 19975

Telephone (Daytime): 800-233-1144 (Evening): 302-841-9059

Fax Number: 302-436-5100 E-Mail Address: russell@alutech.com

License number: T1-0005686 Active License? Yes ☒ No ☐

Is small generator facility eligible for Net Metering? Yes ☒ No ☐

INSURANCE DISCLOSURE

The attached terms and conditions contain provisions related to liability and indemnification, and should be carefully considered by the interconnection customer. The interconnection customer is not required to obtain general liability insurance coverage as a precondition for interconnection approval; however, the interconnection customer is advised to consider obtaining appropriate insurance coverage to cover the interconnection customer's potential liability under this agreement.

CUSTOMER SIGNATURE

I hereby certify that: 1) I have read and understand the terms and conditions which are attached hereto by reference and are a part of this Agreement; 2) I hereby agree to comply with the attached terms and conditions; and 3) to the best of my knowledge, all of the information provided in this application request form is complete and true. I consent to permit the PSC and interconnecting utility to exchange information regarding the generating system to which this application applies.

Interconnection Customer Signature: Richard P Giguere Date: 11/10/15

Printed Name: Richard Giguere Title: Homeowner

Conditional Agreement to Interconnect Small Generator Facility *(for EDC use only)*

Receipt of the application fee is acknowledged and, by its signature below, the EDC has determined the interconnection request is complete. Interconnection of the small generator facility is conditionally approved contingent upon the attached terms and conditions of this Agreement the return of the attached Certificate of Completion duly executed, verification of electrical inspection and successful witness test or EDC waiver thereof.

EDC Signature: _____ Date: _____

Printed Name: _____ Title: _____

Gmail by Google

Shelly Culver <shelly@greenstreetsolar.com>

Interconnection Application - Approval to Install For: RICHARD GIGUERE, DE, Level 1, 55000385173

1 message

gpc-north@pepcoholdings.com <gpc-north@pepcoholdings.com> Wed, Dec 16, 2015 at 10:28 AM
To: rpgone00@hotmail.com
Cc: shelly@greenstreetsolar.com, GPCNEM@pepcoholdings.com

green power connection

We support renewable energy and partner with our customers to ensure safe and reliable interconnection of renewable energy into the electric grid.

Your request is documented as follows:

Customer Name:	**RICHARD GIGUERE**
Street Address:	**523 HARBOR RD # L12**
City, State:	**CLARKSVILLE, DE**
Account Number:	**55000385173**
Source:	**SPV**
Generation Size:	**9.8**
Add-On:	**NO**
Tariff:	**NET METER**

We have completed the technical screen of your interconnection request. Congratulations. The initial part of your interconnection application request is approved and you are now authorized to install your renewable generator system.

Next Steps: You may now build and install your system. After your system has been installed, complete your interconnection request by submitting the following.

- Part II of the Interconnection Application (*Certificate of Completion* ('COC')), and
- local electrical inspection certificate. NOTE: Copies or photos of the inspection stickers will not be accepted.

Friendly reminder: In accordance with State regulations, you are not permitted to turn on your generator system until you have received our written *Authorization to Operate*. Click HERE to learn more about the potential hazards.

Thank you for the opportunity to assist you with your interconnection request. If you have any questions or concerns, please call (866) 634-5571. **To ensure a response, please send all correspondence to gpc-north@pepcoholdings.com**

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Energy for a changing world.™

Your Green Power Connection Team
A PHI Company
(866) 634-5571 - Phone
(856) 351-7523 - Fax

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PART 2

DELAWARE INTERCONNECTION APPLICATION & AGREEMENT

With Terms and Conditions for Interconnection
(Lab Certified Inverter-Based Small Generator Facilities Less than or Equal to 10 kW)

(Final Agreement – must be completed after installation and prior to interconnection)

Certificate of Completion[11]

INTERCONNECTION CUSTOMER CONTACT INFORMATION

Customer Name: Richard Giguere

Mailing Address: 523 Harbor Rd

City: Clarksville State: DE Zip Code: 19970

Telephone (Daytime): _____ (Evening): _____

Fax Number: _____ E-Mail Address: RPGONE00@yahoo.com

FACILITY INFORMATION

Facility Address: 523 Harbor Rd #L12

City: Clarksville State: DE Zip Code: 19970

DPL Account #: 5500 0385 173 Meter #: _____

Energy Source: Solar PV Prime Mover: Photovoltaics

Inverter Type: Forced Commutated ☐ Line Commutated ☒

Number of Inverters: 2

Inverter Manufacturer: Fronius Model Number(s) of Inverter: PRIMO 6.0 & 3.8

Rating

DC Generator Total[12] Nameplate Rating: 10.26 (kW),
AC Inverter Total[13] Rating 9.8 (kW),
AC System Design Total Capacity[14]: 9.8 (kW) 9800 (kVA)

Generator (or PV Panel) Manufacturer, Model #[15]: SolarWorld 285w MONO

[11] Information entered here on Certificate of Completion (Part 2) must match part 1
[12] Sum of all generators or PV Panels
[13] Sum of all inverters
[14] This will be your system design capacity based upon your unique system variables.
[15] If more than one type, please list all manufactures and model numbers.

EQUIPMENT INSTALLATION CONTRACTOR Owner (Customer) Installed: ☐Yes ☐No

Contractor Name: Alutech United Inc

Mailing Address: 117 Dixon St

City: Selbyville State: DE Zip Code: 19975

Telephone (Daytime): 800-233-1144 (Evening): 302-841-9059

Fax Number: 302-436-5100 E-Mail Address: shelly@greenstreetsolar.com

FINAL ELECTRIC INSPECTION AND INTERCONNECTION CUSTOMER SIGNATURE

The Small Generator Facility is complete and has been approved by the local electric inspector having jurisdiction. A signed copy of the electric inspector's form indicating final approval is attached. The Interconnection Customer acknowledges that it shall not operate the Small Generator Facility until receipt of the final acceptance and approval by the EDC as provided below.

* Signed: Richard P Giguere * Date 1/27/16

(Signature of interconnection customer)

Printed Name: Richard Giguere

Check if copy of signed electric inspection form is attached ☒

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ACCEPTANCE AND FINAL APPROVAL FOR INTERCONNECTION ***(for EDC use only)***

The interconnection agreement is approved and the Small Generator Facility is approved for interconnected operation upon the signing and return of this Certificate of Completion by EDC:

Electric Distribution Company waives Witness Test? *(Initial)* Yes (DCD) No (_____)

If not waived, date of successful Witness Test: _____ Passed: *(Initial)* (_____)

EDC Signature: Diana C. DeAngelis Date: 2016.02.04 13:03:22 -05'00' Date: 2/4/16

Printed Name: Diana C. DeAngelis Title: Regulatory Affairs Lead

First State Inspection Agency, Inc.
1001 Mattlind Way
Milford, DE 19963

1-800-468-7338
302-422-3859

Alutech United, Inc.
James Rodrigue
PO Box 329
Selbyville, DE 19975

CERTIFICATE

Final Inspection Date:	1-26-2016
Application #:	019857
Owner:	Ricahrd Giguere
Customer Job #:	
Occupancy:	Solar Array
Location:	523 Harbor Road, Whites Creek Manor, Ocean View, Sussex Co., DE

This certifies that the installation of electrical equipment listed on referenced application has been approved as meeting the requirements of the National Electric Code, utility, municipalities and Agency rules. Any modification, addition or alteration of the electrical system, after the date of final inspection, will require a new application for inspections and certifications.

Chief Electrical Inspector

F.S. CERT

10. If the Applicant's installation is solar or wind sited in Delaware, is a minimum of 50% of the cost of the renewable energy equipment, inclusive of mounting components, manufactured in Delaware?

☐ Yes* ■ No

Alutech United
Company Name of Installer

117 Dixon Street
Address

Selbyville, DE 19975
Address

Signature of Company Representative

Shelly Culver
Print Name of Co. Representative

***If Yes, please attach the following documentation:**

- A copy of the supplier's invoice showing Delaware manufactured equipment with this facility identified
  - If the supplier's invoice shows only a coded Purchase Order (PO) number, a copy of the company's matching PO that includes the address where the materials were used/installed, must also be supplied
  - If using a master invoice, a record of the draws against the purchased quantity, on the master invoice, must show the address of each use and the quantity of material used

11. If the Applicant's installation is solar or wind sited in Delaware:

a. Was the facility physically constructed or installed with a workforce that consists of at least 75% Delaware residents?
☐ Yes* ■ No

b. Does the installing company employ, in total, a minimum of 75% workers who are Delaware residents?

☐ Yes* ■ No

Alutech United
Company Name of Installer

117 Dixon Street
Address

Selbyville, DE 19975
Address

Signature of Company Representative

Shelly Culver
Print Name of Co. Representative

***If Yes, please attach supporting documentation (see pages 7-8 for details). Please note, in order to qualify for the Labor/Workforce Bonus, at least one of the options (a. or b.) must be met.**

Documentation Required for Delaware Labor/Workforce Bonus

11. If the Applicant's installation is solar or wind sited in Delaware:

    a. Was the facility physically constructed or installed with a workforce that consists of at least 75% Delaware residents?

If you answered yes to "a." above, complete the following as evidence.

The following individuals (list every employee) were employed by

Alutech United DBA Green Street Solar

Installation Company Name

as direct labor (physical construction and installation) for this facility: (Attach additional sheets if necessary)

Please complete the following information for all individuals listed above:

Name	Home Address (As per Tax Withholding)	Social Security Number (Last 4 digits only)
N/A		

Total Delaware Resident Employees: 20 **Total Number of Employees:** 30

% of Delaware Residents (Delaware Residents Divided by Total Employees): 67%

Documentation Required for Delaware Labor/Workforce Bonus

11. If the Applicant's installation is solar or wind sited in Delaware:

    b. Does the installing company employ, in total, a minimum of 75% of workers who are Delaware residents?

If you answered yes to "b." above, complete the following as evidence:

Alutech United DBA Green Street Solar

Installation Company Name

employed the following individuals (list EVERY employee on the payroll during the period from project start date until project completion date). Projects are considered complete upon final interconnection approval to operate. (Attach additional sheets if necessary)

Project Start Date:_____ Project Complete Date:_____

Employee Full Name	Home Address (As per Tax Withholding)	Social Security Number (Last 4 digits Only)
N/A		

Total Delaware Resident Employees: 20 **Total Number of Employees:** 30

% of Delaware Residents (Delaware Residents Divided by Total Employees): 67%

	NAME	STREET ADDRESS	CITY	ST	ZIP	SS#
1	Aaron Woods	22763 Coverdale Road	Seaford	DE	19973	25
2	Adam Ash	36096 Zion Church Road	Frankford	DE	19945	24
3	Alfred Bangert	17905 Careys Camp Road	Laurel	DE	19956	33
4	Antione Johnson	27542 Holly Hock Lane	Seaford	DE	19973	29
5	Cody Perry	112 East Tingle Drive	Selbyville	DE	19975	75
6	Daniel Fleetwood, III	36157 Millers Neck Road	Frankford	DE	19945	68
7	David Linehan	26393 Sea Mist Court	Millsboro	DE	19966	85
8	Derek Dykes	31866 Mountain Laurel Ridge	Laurel	DE	19956	74
9	Donnie Baker	35359 Danny Drive	Laurel	DE	19956	60
10	Dustin Brittingham	2 Leah Street	Georgetown	DE	19947	01
11	George Carey	36966 Deer Drive	Selbyville	DE	19975	69
12	George Pfaller	24501 Cedar Lane	Georgetown	DE	19947	48
13	James Webb	629 Gun and Rod Club Road	Harrington	DE	19952	63
14	Jason Killen	16502 Old Furnace Road	Georgetown	DE	19947	18
15	Jason Roth	36851 Old Mill Bridge Road	Selbyville	DE	19975	90
16	Jose Cordoba	Lazy Lagoon Lot 41	Frankford	DE	19945	42
17	Michael Haymond	12640 Beach Hwy.	Greenwood	DE	19950	01
18	Richard Jalot, 2nd	18546 Sand Hill Rd.	Georgetown	DE	19947	22
19	W. Jeffrey Timmons	11127 Signature Blvd.	Selbyville	DE	19975	52
20	William Warden	26163 Kelly Circle	Seaford	DE	19973	89
21	Brian Reed, Jr.	233 Briarwood Circle	Denton	MD	21629	00
22	Erik Diaz-Padilla	105 Caroline St., Unit 6	Ocean City	MD	21842	15
23	John Basch	1504 Sharen Drive, Apt. F	Salisbury	MD	21801	96
24	Kyle Handy	106 Meadow Drive, Unit 208	Easton	MD	21601	00
25	Lisa Bloom	403 143rd Street, Unit 5	Ocean City	MD	21842	74
26	Mark Caldwell	1004 Philadelphia Avenue, Unit 5	Ocean City	MD	21842	20
27	Richie Wright	5637 Caledonia Drive	Salisbury	MD	21801	40
28	Russell Pfaller	7167 Chatham Manor Way	Pittsville	MD	21850	98
29	Shelly Culver	1010 Marley Manor Drive, #101	Salisbury	MD	21804	59
30	Tyler Burr	403 143rd Street, Unit 5	Ocean City	MD	21842	69